

**SPECIAL VOLUME (PART 2) TO MARK  
THE CENTENNIAL OF JULIUS PETERSEN'S  
'DIE THEORIE DER REGULÄREN GRAPHS'**

Guest Editors: Lars Døvling Andersen

Jørgen Bang-Jensen

Tommy R. Jensen

Leif Kjær Jørgensen

Gert Sabidussi

Carsten Thomassen

Bjarne Toft

Preben Dahl Vestergaard

**CONTENTS**

<i>K. Cameron and J. Edmonds</i> Coflow polyhedra	1
<i>P. Erdős, R.J. Faudree and C.C. Rousseau</i> Extremal problems involving vertices and edges on odd cycles	23
<i>H. Fleischner</i> Spanning eulerian subgraphs, the Splitting Lemma, and Petersen's Theorem	33
<i>H. Fleischner and M. Stiebitz</i> A solution to a colouring problem of P. Erdős	39
<i>A. Frank</i> On a theorem of Mader	49
<i>Z. Füredi</i> Indecomposable regular graphs and hypergraphs	59
<i>J.R. Griggs and J.P. Hutchinson</i> On the $r$ -domination number of a graph	65
<i>H. Gropp</i> Enumeration of regular graphs 100 years ago	73
<i>E. Györi and M.D. Plummer</i> The Cartesian product of a $k$ -extendable and an $l$ -extendable graph is $(k+l+1)$ -extendable	87
<i>R. Halin</i> Some finiteness results concerning separation in graphs	97
<i>D. Hanson</i> A quick proof that $K_{10} \neq P + P + P$	107
<i>D. Hanson, P. Wang and L.K. Jørgensen</i> On cages with given degree sets	109
<i>R.L. Hemminger and X. Yu</i> On 3-connected graphs with contractible edge covers of size $k$	115

**SPECIAL VOLUME (PART 2) TO MARK  
THE CENTENNIAL OF JULIUS PETERSEN'S  
'DIE THEORIE DER REGULÄREN GRAPHS'**

Guest Editors: Lars Døvling Andersen

Jørgen Bang-Jensen

Tommy R. Jensen

Leif Kjær Jørgensen

Gert Sabidussi

Carsten Thomassen

Bjarne Toft

Preben Dahl Vestergaard

**CONTENTS**

<i>K. Cameron and J. Edmonds</i> Coflow polyhedra	1
<i>P. Erdős, R.J. Faudree and C.C. Rousseau</i> Extremal problems involving vertices and edges on odd cycles	23
<i>H. Fleischner</i> Spanning eulerian subgraphs, the Splitting Lemma, and Petersen's Theorem	33
<i>H. Fleischner and M. Stiebitz</i> A solution to a colouring problem of P. Erdős	39
<i>A. Frank</i> On a theorem of Mader	49
<i>Z. Füredi</i> Indecomposable regular graphs and hypergraphs	59
<i>J.R. Griggs and J.P. Hutchinson</i> On the $r$ -domination number of a graph	65
<i>H. Gropp</i> Enumeration of regular graphs 100 years ago	73
<i>E. Györi and M.D. Plummer</i> The Cartesian product of a $k$ -extendable and an $l$ -extendable graph is $(k + l + 1)$ -extendable	87
<i>R. Halin</i> Some finiteness results concerning separation in graphs	97
<i>D. Hanson</i> A quick proof that $K_{10} \neq P + P + P$	107
<i>D. Hanson, P. Wang and L.K. Jørgensen</i> On cages with given degree sets	109
<i>R.L. Hemminger and X. Yu</i> On 3-connected graphs with contractible edge covers of size $k$	115

<i>A.J.W. Hilton and Z. Cheng</i>	
The chromatic index of a graph whose core has maximum degree two	135
<i>F. Jaeger</i>	
A new invariant of plane bipartite cubic graphs	149
<i>H.A. Kierstead and W.T. Trotter</i>	
Colorful induced subgraphs	165
<i>W. Kocay</i>	
An extension of the multi-path algorithm for finding hamilton cycles	171
<i>A.V. Kostochka</i>	
List edge chromatic number of graphs with large girth	189
<i>D.D.-F. Liu</i>	
<i>T</i> -colorings of graphs	203
<i>J. Mayer</i>	
Conjecture de Hadwiger: $k = 6$ . II—Réductions de sommets de degré 6 dans les graphes 6-chromatiques contraction-critiques	213
<i>J. Nešetřil and V. Rödl</i>	
On Ramsey graphs without bipartite subgraphs	223
<i>K.B. Reid and W. Gu</i>	
Plurality preference digraphs realized by trees, II: On realization numbers	231
<i>G. Sabidussi</i>	
Binary invariants and orientations of graphs	251
<i>H. Sachs</i>	
How to calculate the number of perfect matchings in finite sections of certain infinite plane graphs	279
<i>A. Saito</i>	
Cycles of length 2 modulo 3 in graphs	285
<i>K. Seyffarth</i>	
Hajós' conjecture and small cycle double covers of planar graphs	291
<i>M. Stiebitz</i>	
On Hadwiger's number—A problem of the Nordhaus–Gaddum type	307
<i>H.J. Veldman</i>	
Cycles containing many vertices of large degree	319
<i>D.R. Woodall</i>	
An inequality for chromatic polynomials	327
<i>D.R. Woodall</i>	
A zero-free interval for chromatic polynomials	333
<i>D.A. Youngs</i>	
Gallai's problem on Dirac's construction	343
<i>J. Bang-Jensen and B. Toft</i>	
Unsolved problems presented at the Julius Petersen Graph Theory Conference	351
<i>P. Hein</i>	
The road to wisdom?	361
Author index to volume 101	363